

Serial No.: 09/725,674

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 6, 7, 8, 12 and 13 in accordance with the following:

1. (original) A data management method for distributing digital content in which annex information is visibly arranged, the data management method comprising:
 - a step of duplicating as a discrete data unit a part of said digital content including a position where said annex information is visibly arranged, and encrypting the discrete data unit to create an encrypted discrete data unit;
 - a step of embedding within said digital content as invisible information image-compositing information, relating to position and size for arranging said annex information in said digital content, and authorization information, including encryption key information by which said discrete data unit is encrypted, to create an authorization information-added data unit;
 - a step of visibly arranging said annex information in a position corresponding to the discrete data unit for said authorization information-added data unit, to create an annex information-added data unit; and
 - a step of creating and distributing composite data composited from said encrypted discrete data unit and said annex information-added data unit.
2. (original) The data management method set forth in claim 1, wherein said annex information is embedded in said digital content as a visible digital watermark.
3. (original) The data management method set forth in claim 2, wherein annex information equivalent to annex information embedded in said digital content as a visible digital watermark is embedded in said discrete data unit as an invisible digital watermark and is encrypted to create an encrypted discrete data unit.

Serial No.: 09/725,674

4. (original) The data management method set forth in claim 1, wherein said image-compositing information and authorization information are encrypted with a secret key and embedded in said digital content as invisible information.

5. (original) The data management method set forth in claim 4, wherein said image-compositing information and authorization information are encrypted with a secret key, and embedded as an invisible digital watermark in a portion of said digital content including the position where said annex information in said digital content is visibly arranged.

6. (currently amended) The data management method set forth in claim 4, wherein said secret key is at least one selected from among: user identification information, identification information for on-board devices in users' in-use computers, identification information for on-board CPUs in users' in-use computers, identification information specific to recording media storing said digital content, and user login information registered in users' in-use computers.

7. (currently amended) The data management method set forth in claim 4, wherein said secret key is identification information common to a plurality of users.

8. (currently amended) The data management method set forth in claim 4, wherein said secret key is at least one selected from among identification information specific to distributors of said digital content, and identification information specific to copyright holders of said digital content.

9. (original) The data management method set forth in claim 1, further comprising:
a step of separating the authorization information-added data unit and the encrypted discrete data unit from the distributed composite data;
a step of extracting the image-compositing information and the authorization information from the separated authorization information-added data unit;
a step of using the extracted authorization information to restore the encryption key by which said encrypted discrete data unit is encrypted;

Serial No.: 09/725,674

a step of using the restored encryption key to restore said encrypted discrete data unit into the discrete data unit; and

a step of compositing, based on said image-compositing information, the restored discrete data unit into image data for said authorization information-added data unit.

10. (original) The data management method set forth in claim 9, wherein invisible information embedded in said authorization information-added data unit includes use count information on times users use said digital content, and said invisible information is overwritten every time a user uses said digital content.

11. (original) The data management method set forth in claim 10, wherein if the use count information included in said invisible information exceeds a predetermined value, users' use is restricted.

12. (currently amended) The data management method set forth in claim 4 9, configured to restrict saving of the image-compositing information and authorization information extracted from said authorization information-added data unit.

13. (currently amended) The data management method set forth in claim 4 9, configured to restrict saving of the image data in which the restored discrete data unit is composited into the image data for said authorization information-added data unit.

14. (original) A recording medium on which is recorded a program for an image-generating method comprising:

a step of duplicating as a discrete data unit a part of digital content including a position where annex information is visibly arranged, and encrypting the discrete data unit to create an encrypted discrete data unit;

a step of embedding within said digital content as invisible information image-compositing information, relating to position and size for arranging said annex information in said digital content, and authorization information, including encryption key information by which said discrete data unit is encrypted, to create an authorization information-added data unit;

Serial No.: 09/725,674

a step of visibly arranging said annex information in a position corresponding to the discrete data unit for said authorization information-added data unit, to create an annex information-added data unit; and

a step of creating composite data composited from said encrypted discrete data unit and said annex information-added data unit.

15. (original) A transmission medium transmitting a program for a method of image creation comprising:

a step of duplicating as a discrete data unit a part of digital content including a position where annex information is visibly arranged, and encrypting the discrete data unit to create an encrypted discrete data unit;

a step of embedding within said digital content as invisible information image-compositing information, relating to position and size for arranging said annex information in said digital content, and authorization information, including encryption key information by which said discrete data unit is encrypted, to create an authorization information-added data unit;

a step of visibly arranging said annex information in a position corresponding to the discrete data unit for said authorization information-added data unit, to create an annex information-added data unit; and

a step of creating composite data composited from said encrypted discrete data unit and said annex information-added data unit.

16. (original) A recording medium on which is recorded a program for an image-restoration method comprising:

a step of separating an authorization information-added data unit and an encrypted discrete data unit from distributed composite data;

a step of extracting image-compositing information and authorization information from the separated authorization information-added data unit;

a step of using the extracted authorization information to restore the encryption key by which said encrypted discrete data unit is encrypted;

a step of using the restored encryption key to restore said encrypted discrete data unit into the discrete data unit; and

Serial No.: 09/725,674

a step of compositing, based on said image-compositing information, the restored discrete data unit into image data for said authorization information-added data unit.

17. (original) A transmission medium for transmitting a program for an image-restoration method comprising:

a step of separating an authorization information-added data unit and an encrypted discrete data unit from distributed composite data;

a step of extracting image-compositing information and authorization information from the separated authorization information-added data unit;

a step of using the extracted authorization information to restore the encryption key by which said encrypted discrete data unit is encrypted;

a step of using the restored encryption key to restore said encrypted discrete data unit into the discrete data unit; and

a step of compositing, based on said image-compositing information, the restored discrete data unit into image data for said authorization information-added data unit.